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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,345	10/08/2003	Daniel Amyot	1244.43183X00	5635
20457 7590 09/04/2007 ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-3873			EXAMINER WHIPPLE, BRIAN P	
			ART UNIT 2152	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/680,345	Applicant(s) AMYOT ET AL.	
	Examiner Brian P. Whipple	Art Unit 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 October 2003 and 15 June 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/15/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-28 are pending in this application and presented for examination.

Claims 15-28 were added by applicant's amendment received on 6/26/07.

Response to Arguments

2. Applicant's arguments; see pg. 16, ln. 15-22, filed 6/26/07, with respect to the priority document, Information Disclosure statement, Fig. 1, and claims 1, 10, and 11 have been fully considered and are persuasive. The relevant objections and rejections of 6/26/07 have been withdrawn.

3. Applicant's arguments with respect to the 35 U.S.C. 103(a) rejections of the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

4. Claims 15-28 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 1-14. Applicant stated that claims 15-28, see pg. 17, ln. 4-6, are drawn to a policy-based *system* (emphasis added by Examiner), but the claims are drawn to a method and thus identical to claims 1-14.

When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Drawings

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the receiving of user-entered policies in a user-understandable representation, translation into a formal executable language, translation from an executable language into a policy language, analyzing to find feature interaction errors, reporting said errors to a user, providing the user with a recommendation to correct errors, re-integration into executable language, and uploading said policies for execution (i.e. the limitations of claim 1 in their entirety) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Additionally, the dependent claims possess similar problems. For example, the decision tree as detailed in claims 7-9 is not represented in the drawings.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-28 are rejected under the second paragraph of 35 U.S.C. 112.
8. As to claims 1 and 15, it is unclear if the use of the phrase "user-understandable representation" is meant to contrast with the phrases "policy language" and "executable feature language." In other words, Examiner is unclear if the policy language and executable feature language should be treated as not capable of being understood by a user, or if they are also user-understandable. Clarification is required.
9. As to claims 9 and 23, each claim should end in a period and consist of a single sentence. Claims 9 and 23 contain a table, which fails to comply with the one sentence requirement, and there is no period at the end of the claim. Additionally, it is unclear if the table should be treated as a limitation; and further whether each correspondence in the table must be treated as part of the claim. For example, Examiner may find a name in a policy corresponding to a rule name, and would have satisfied "using the following

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mapping” as the claim does not state that every correspondence in the table must be satisfied. In other words, it is a question of whether “or” or “and” would follow each correspondence. Clarification is required.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lineman et al. (Lineman), U.S. Publication No. 2003/0065942 A1, in view of Ahlstrom et al. (Ahlstrom), U.S. Patent No. 6,327,618 B1, in view of Ahlstrom et al. (Ahlstrom II), U.S. Patent No. 6,418,468 B1.

12. As to claim 1, Lineman discloses a method of user policy management in a communication system, comprising: receiving user-entered policies in a user-understandable representation capable of translation into a formal executable language ([0028], ln. 3-6; [0032], ln. 4-6; [0033], ln. 1-5; [0053], ln. 7-14);

translating said policies from said user-understandable representation into an executable feature language capable of execution by said communication system ([0033], ln. 1-5; [0034], ln. 1-7; [0053], ln. 7-14);

translating said policies from said executable feature language into a policy language ([0037], ln. 1-8; [0056], ln. 3-6; the communication of the XML file to machine-readable code for use by the computer systems may be interpreted as translating the executable feature language into a policy language) and

re-integration of said policies in said executable feature language ([0035], ln. 3-7; [0057], ln. 8-13; the contents of the XML file, the policy, had to be communicated as machine-readable code, a policy language, between computer systems across the network and subsequently re-integrated into an XML file on the receiving side, the user-end, of the network, this may be interpreted as re-integrating the policy into an executable feature language); and

uploading said policies for execution by said communication system ([0035], ln. 1-7; [0037], ln. 1-8).

Lineman is silent on detecting common feature interaction errors between said policies;

analyzing said feature interaction errors to identify errors that are common to naive users;

reporting said errors that are common to the user in said user-understandable representation;

providing the user with a recommendation for correction of said feature interaction errors.

However, Ahlstrom discloses detecting common feature interaction errors between said policies (Abstract, ln. 1-3);

analyzing said feature specification errors to identify errors that are common to naive users (Col. 5, ln. 64-67; Col. 6, ln. 1-2);

reporting said errors that are common to the user in said user-understandable representation (Col. 9, ln. 13-14).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Lineman by detecting, analyzing, and reporting common feature interaction errors to a user as taught by Ahlstrom in order to allow the user to remove a conflict from conflicting policies (Ahlstrom: Col. 5, ln. 64-67; Col. 6, ln. 1-2).

Lineman and Ahlstrom are silent on providing the user with a recommendation for correction of said feature interaction errors.

However, Ahlstrom II discloses providing the user with a recommendation for correction of said feature interaction errors (Col. 8, ln. 21-40).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Lineman and Ahlstrom by providing the user with a recommendation for correction of feature interaction errors as taught by Ahlstrom II in order to provide recommendations for resolution when the user is unable to solve the problem and ensure undefined results and failures are avoided (Ahlstrom II: Col. 8, ln. 21-40).

13. As to claim 2, Lineman, Ahlstrom, and Ahlstrom II disclose the invention substantially as in parent claim 1, including said user-understandable representation is a Web browser interface (Lineman: Fig. 10B; [0057], ln. 10-13).

14. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lineman, Ahlstrom, and Ahlstrom II as applied to claim 1 above, and further in view of Glitho et al. (Glitho), U.S. Patent No. 6,940,847 B1.

15. As to claim 3, Lineman, Ahlstrom, and Ahlstrom II disclose the invention substantially as in parent claim 1, but are silent on said executable feature language is Call Processing Language (CPL).

However, Glitho discloses said executable feature language is Call Processing Language (CPL) [Col. 2, ln. 48-50].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Lineman, Ahlstrom, and Ahlstrom II by utilizing Call Processing Language as taught by Glitho in order to use a standard known in IP telephony (Glitho: Col. 2, ln. 45-50).

16. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lineman, Ahlstrom, and Ahlstrom II as applied to claim 1 above, and further in view of Gorse, The Feature Interaction Problem: Automatic Filtering of Incoherences & Generation of Validation Test Suites at the Design Stage (Gorse).

17. As to claim 4, Lineman, Ahlstrom, and Ahlstrom II disclose the invention substantially as in parent claim 1, but are silent on said policy language is Feature Interaction Analysis Tool (FIAT).

However, Gorse discloses said policy language is Feature Interaction Analysis Tool (FIAT) [Pg. 67, ¶ 2, ln. 1-7; the instant disclosure defines Gorse's tool as FIAT, see pg. 9, ln. 18-22].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Lineman, Ahlstrom, and Ahlstrom II by utilizing Feature Interaction Analysis Tool as taught by Gorse in order to analyze incoherences and generate reports (Gorse: Pg. 67, ¶ 2, ln. 2-3).

18. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lineman, Ahlstrom, and Ahlstrom II as applied to claim 1 above, and further in view of Moaven et al. (Moaven), U.S. Publication No. 2002/0184535 A1, and further in view of Rychel et al. (Rychel), U.S. Publication No. 2002/0198892 A1.

19. As to claim 5, Lineman, Ahlstrom, and Ahlstrom II disclose the invention substantially as in parent claim 1, including said step of receiving user-entered policies in said user-understandable representation further comprises receiving user-entered operations on said policies, including: Create: for creating and activating a new policy (Lineman: [0032], ln. 4-6);

Modify: for modifying a selected policy (Lineman: Fig. 5A; [0032], In. 4-6; [0048], In. 9-14);

Duplicate: for making a copy of a selected policy (Lineman: [0042], In. 11-14).

Set Priority: for setting priority of a selected policy to one of either an absolute priority or a relative priority (Ahlstrom: Col. 5, In. 64-67; Col. 6, In. 1-2; Col. 9, In. 29-37);

Validate: for detecting and reporting conflicts among active ones of said policies (Ahlstrom: Fig. 2A, items 202, 206, 208, and 210; Col. 5, In. 64-66; Col. 9, In. 42-44; Col. 10, In. 6-8, 20-22, and 29-31);

Approve: for approving and enabling selected policies for execution (Ahlstrom: Fig. 2A, items 208 and 215-216; Col. 10, In. 38-41 and 63-67).

Lineman, Ahlstrom, and Ahlstrom II are silent on Delete: for deleting a selected policy;

Deactivate: for deactivating a selected policy;

Activate: for activating a selected inactive policy.

However, Moaven discloses Delete: for deleting a selected policy ([0062], In. 6-8);

Deactivate: for deactivating a selected policy ([0062], In. 6-8; deleting a policy may be interpreted as deactivating a policy).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Lineman, Ahlstrom, and Ahlstrom II by allowing a user to delete and deactivate policies as taught by Moaven in order to remove policies that are no longer needed or desired.

Lineman, Ahlstrom, Ahlstrom II, and Moaven are silent on Activate: for activating a selected inactive policy.

However, Rychel discloses Activate: for activating a selected inactive policy ([0064], In. 14-17; the configuration of options may be interpreted as a policy).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Lineman, Ahlstrom, Ahlstrom II, and Moaven by allowing a user to activate a selected inactive policy as taught by Rychel in order to activate a policy that is once again needed or desired.

20. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lineman, Ahlstrom, and Ahlstrom II as applied to claim 1 above, and further in view of Chiang, U.S. Publication No. 2002/0103895 A1.

21. As to claim 6, Lineman, Ahlstrom, and Ahlstrom II disclose the invention substantially as in parent claim 1, including each said policy includes: a name for use as a unique identifier (Lineman: [0073], In. 1-3).

a priority, expressed as a numerical value (Ahlstrom: Col. 9, In. 34-37; a partial order of all policies may be interpreted as numerical values);

an operation, for application to a call within said communication system (Ahlstrom: Col. 6, In. 34-41; Communication between a source and destination may be interpreted as a call.);

a precondition, based on characteristics of a caller or callee, whereby said policy is general in the event that the precondition is a domain of values, and is specialized in the event that the precondition relates to particular values (Ahlstrom: Col. 6, ln. 38-41; Col. 7, ln. 14-20);

a target, for said operation (Ahlstrom: Col. 7, ln. 55);

and a time constraint, during which the policy is active (Ahlstrom: Col. 6, ln. 38-41).

Lineman, Ahlstrom, and Ahlstrom II are silent on an optional list of exceptions to said precondition in the event that that said policy is general.

However, Chiang discloses an optional list of exceptions to said precondition in the event that that said policy is general ([0035], ln. 4-10; [0036], ln. 1-2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Lineman, Ahlstrom, and Ahlstrom II by utilizing an optional list of exceptions to a precondition in a general policy in order to allow exceptions such as allowing unlimited access bandwidth in an environment that would normally limit bandwidth (Chiang: [0035], ln. 6-9).

22. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lineman, Ahlstrom, Ahlstrom II, and Chiang as applied to claims 1 and 6 above, and further in view of Wiegel, U.S. Patent No. 6,484,261 B1.

23. As to claim 7, Lineman, Ahlstrom, Ahlstrom II, and Chiang disclose the invention substantially as in parent claim 6, but are silent on individual ones of said policies are translated into said executable feature language as scripts representing individual branches of a decision tree, with explicit priorities allocated among said branches.

However, Wiegel discloses individual ones of said policies are translated into said executable feature language as scripts representing individual branches of a decision tree (Col. 14, In. 12-17 and 20-29), with explicit priorities allocated among said branches (Col. 10, In. 1-15 and 33-36; Col. 14, In. 7-11; It may be interpreted that the creation of the security policies by the user, through the use of a graphical display of the decision tree, allows the user to explicitly allocate priorities among said branches, as a decision tree considers branches in the order defined.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Lineman, Ahlstrom, Ahlstrom II, and Chiang by translating policies into an executable feature language as scripts representing individual branches of a decision tree with explicit priorities allocated among the branches as taught by Wiegel in order to provide users with a intuitive and logical method for defining policies (Wiegel: Col. 10, In. 33-36) and arrange a policy that compares relative importance of different aspects of itself (Wiegel: Col. 14, In. 7-11).

24. Claims 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lineman, Ahlstrom, Ahlstrom II, Chiang, and Wiegel as applied to claims 1 and 6-7 above, and further in view of Bell et al. (Bell), U.S. Patent No. 6,880,005 B1.

25. As to claim 8, Lineman, Ahlstrom, Ahlstrom II, Chiang, and Wiegel disclose the invention substantially as in parent claim 7, but are silent on said priorities are allocated by numerically naming the individual branches.

However, Bell discloses said priorities are allocated by numerically naming the individual branches (Fig. 3; Col. 4, ln. 36-42).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Lineman, Ahlstrom, Ahlstrom II, Chiang, and Wiegel by numerically naming individual branches to allocate priority as taught by Bell in order to easily identify the priority of each branch.

26. As to claim 9, Lineman, Ahlstrom, Ahlstrom II, Chiang, Wiegel, and Bell disclose the invention substantially as in parent claim 8, including said step of translating said policies from said executable feature language into said policy language further comprises visiting successive ones of said branches downwardly and producing corresponding rules, using the following mapping (Wiegel: Col. 1, ln. 44-47; Col. 10, ln. 25-28; Col. 14, ln. 27-31):

the table included in claim 9 (see the rejection of claim 6 above).

27. As to claim 10, Lineman, Ahlstrom, Ahlstrom II, Chiang, Wiegel, and Bell disclose the invention substantially as in parent claim 9, including said step of analyzing said feature specification errors to identify errors that are common to naive users further

includes determining whether each said policy is general or specialized (Ahlstrom: Col. 6, In. 38-41; Col. 7, In. 14-20) and then comparing relative priorities of said policies (Ahlstrom: Col. 5, In. 64-67; Col. 6, In. 1-2).

28. As to claim 11, Lineman, Ahlstrom, Ahlstrom II, Chiang, Wiegel, and Bell disclose the invention substantially as in parent claim 10, including said step of reporting said errors further includes identifying a category of incoherence, assigning a role of each policy in the occurrences of said errors, and providing an example of possible misbehavior resulting from said interaction (Ahlstrom: Col. 10, In. 21-23 and 53-62; Finding a policy conflict may be interpreted as identifying a category of incoherence; Reporting potential conflicts in a "what if" scenario may be interpreted as providing examples of possible misbehavior.).

29. As to claim 12, Lineman, Ahlstrom, Ahlstrom II, Chiang, Wiegel, and Bell disclose the invention substantially as in parent claim 11, including said errors that are common to naive users and are reported in said reporting step include (Ahlstrom: Col. 9, In. 13-14):

Redundancy: whereby two general policies are active (Ahlstrom: Col. 8, In. 40-42 and 44-46);

Shadowing: whereby a general policy overrides a specific policy such that the specific policy can never be triggered (Ahlstrom: Col. 8, In. 43 and 46-48);

Conflict: whereby two policies have overlapping preconditions but with different resulting actions (Ahlstrom: Col. 9, In 20-25);

Specialization: whereby a specific policy is selected over a general policy of lower priority (Bell: Fig. 3; Col. 3, In 3-25).

30. As to claim 13, Lineman, Ahlstrom, Ahlstrom II, Chiang, Wiegel, and Bell disclose the invention substantially as in parent claim 12, including said Redundancy error includes a Conflict with Redundancy error whereby a general policy and an exception for the other general policy lead to different resulting actions (Chiang: [0035], In. 4-10; [0036], In. 1-2).

31. As to claim 14, Lineman, Ahlstrom, Ahlstrom II, Chiang, Wiegel, and Bell disclose the invention substantially as in parent claim 13, including said step of providing the user with a recommendation for correction of said feature interaction errors includes the following suggestions: edit a policy (Ahlstrom: Col. 9, In. 29-30);

disable a policy (Ahlstrom: Col. 6, In. 49-53; Col. 10, In. 32-35; Deleting the relations from a policy disables the policy.);

set the priority of a first policy above or below the priority of a second policy (Ahlstrom: Col. 9, In. 30-37);

tolerate the interaction and no longer report it (Ahlstrom: Col. 9, In. 30-37;
Assigning relative priorities, but allowing both policies to remain active may be

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interpreted as tolerating the interaction; the interaction will no longer be reported if prioritization has occurred.);

add an exception to a general rule (Chiang: [0035], ln. 4-10; [0036], ln. 1-2).

32. As to claims 15-28, the claims are rejected for the same reasons as claims 1-14 above.

Conclusion

33. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Whipple whose telephone number is (571) 270-1244. The examiner can normally be reached on Mon-Fri (8:30 AM to 5:00 PM EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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BPW

Brian P. Whipple
8/29/07BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER

8/30/7